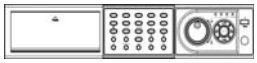
Thank you for purchasing our product.
Please read this User's Manual before
using the product. Change without Notice

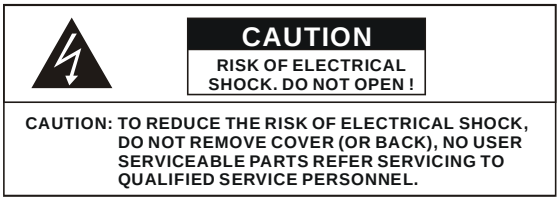
4 Channel Digital Video Recorder

User's Manual



securitytec

Safety Precautions


CAUTION
RISK OF ELECTRICAL SHOCK. DO NOT OPEN !
CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER (OR BACK), NO USER SERVICEABLE PARTS REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of insulated dangerous Voltage within the product's enclosure that may be sufficient magnitude to constitute risk of electrical shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE UNITS NOT SPECIFICALLY DESIGNED FOR

Attention: installation should be performed by qualified service Personnel only in accordance with the National Electrical Code or applicable local codes.

Power Disconnect. Units with or without ON-OFF switches have power supplied to the unit whenever the power cord is inserted into the power source; however, the unit is operational only when the ON-OFF switch is the ON position. The power cord is the main power disconnect for all unites.

Warranty and Service

There are no serviceable parts for this unit, call for your agent for details.

About this document

Before installing stand alone DVR, be sure to thoroughly review and follow the instructions in this Users Manual. Pay particular attention to the parts that are marked **NOTICE**.
Also, when connecting with external application, first turn the power OFF and follow manual instruction for appropriate installation.

Before reading this document

1. This document is intended for both the administrator and users of stand alone DVR Model.
2. This manual contains information for configuring, managing and using stand alone DVR Model.
3. To prevent fire or electrical shock, do not expose the product to heat or moisture
4. Be sure to read this manual before using stand alone DVR Model.
5. For questions and technical assistance of this product, contact your local dealer.

►Strong recommendation on installation of the DVR unit

1. Check electricity at the place you want to install the DVR unit is stable and meets our electricity requirements.
   Unstable electricity will cause malfunction of the unit or give critical damage to the unit.
2. Several chips on the main board of the DVR unit and hard disk drive inside the unit generate heat, and it must be properly discharged.
   Do not put any objects just beside exhaust port(fan) on the left side of the unit and do not close up an opening (fresh air in-take) on the right side of the unit..
3. Put the DVR unit at well-ventilated place and do not put heat-generating objects on the unit.
   When it is installed inside 19 inch mounting rack together with other devices, please check built-in ventilation fan of the rack is properly running.

FCC Statement:

WARNING

This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received including interference that may cause undesired operation."

*** Federal Communications Commission (FCC) Statement**

WARNING

This Equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

* You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

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Hardware

1 X DVR Machine

1 X Power Cord

1 X IDE cable

1 X Adaptor 12V

1 X User Manual

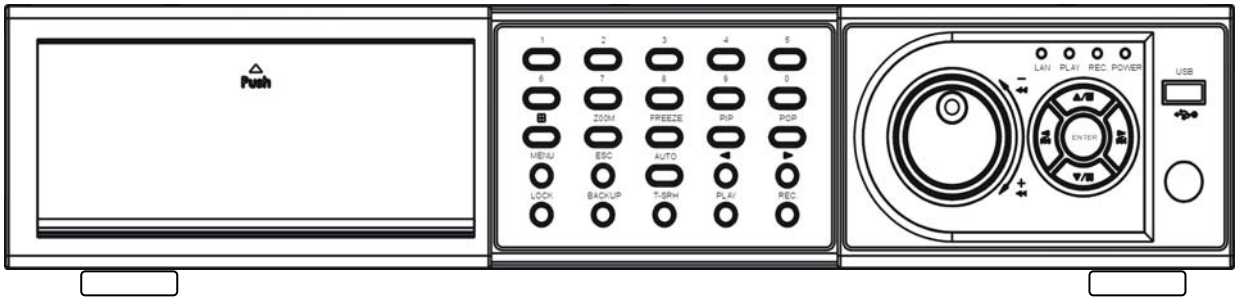
1 X Remote controller

1 X CD

8 X Screw (Without Hard Disk)

4 X Screw (Within one Hard Disk)

Unit Description of Front Panel



1 ~ 4 camera channel full screen choose button / 0 ~ 9 password input

Quad screen display button

PIP — Picture in picture button

ZOOM — Picture 2x2 zoom in

POP — Picture on picture button

FREEZE — Picture Freeze

AUTO — Channel auto sequence button

MENU — Function menu button

ESC — Function exit button

LOCK — Key lock button

◁ ▷ — Value change button

BACKUP — Image backup button

T-SRH — Time search button

PLAY — Image playback button

REC — Image record button

Direction button Up and Down /
Record or playback stop /
playback pause or step button.

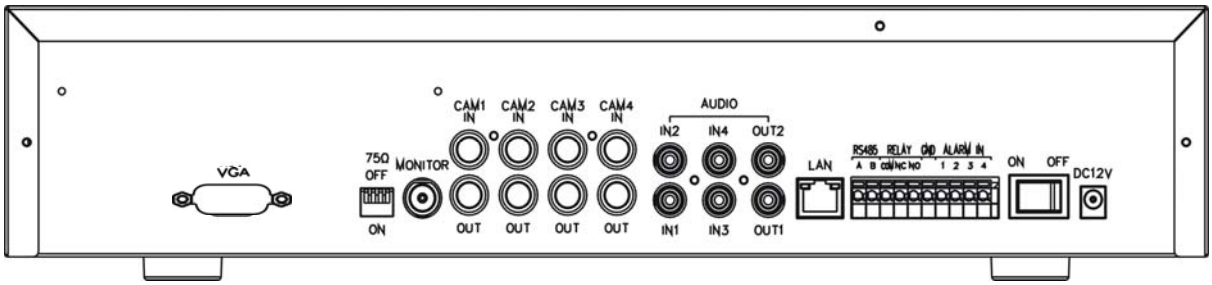
Direction button left and right,
Fast / Slow Reverse,
Fast / Slow forward playback.

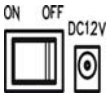
JOG Shuttle

USB port

Remote controller IR

Unit Description of Rear Panel

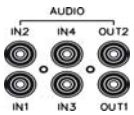




Power cord in DC 12V, power switcher

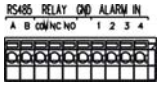
Camera 1 ~ 4 input and looping output

75 ohm high and low dips switch / Monitor out



Audio channel input x 4 and output x 2

VGA



RS 485 A + / B –
Alarm In: 1 / 2 / 3 / 4
Relay: NO / NC / COM

Network connector.

NOTICE:

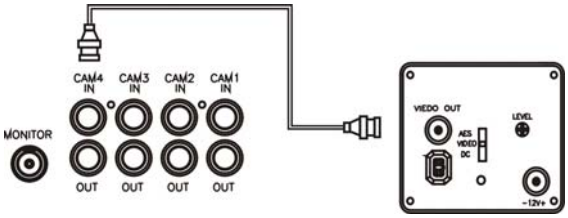
VGA connection is not a standard video output of this unit. Call your local dealer for optional purchase.

Installation

Procedure

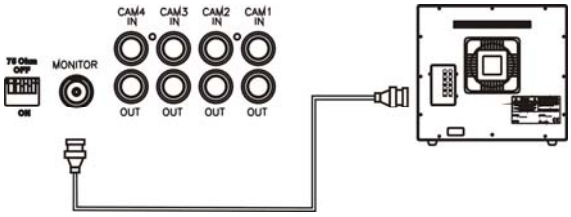
1) Camera Connection

Connect camera to the CAMERA INPUT located at rear side of the DVR.



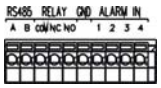
2) Monitor Connection (Composite Connection Method)

Connect monitor to the MONITOR output located at rear side of the DVR.



3) Sensor Connection

Connect the Sensor to the SENSOR INPUT / OUTPUT at the Rear Panel of the DVR

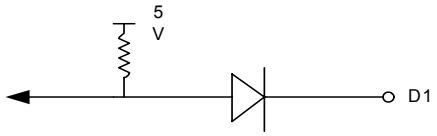


Relay output : COM+NC, COM+NO

Alarm input : Short-circuit between Alarm1, Alarm2, Alarm3 or Alarm4 and GND is recognized as alarm. Alarm 1~4 = Camera1~4.

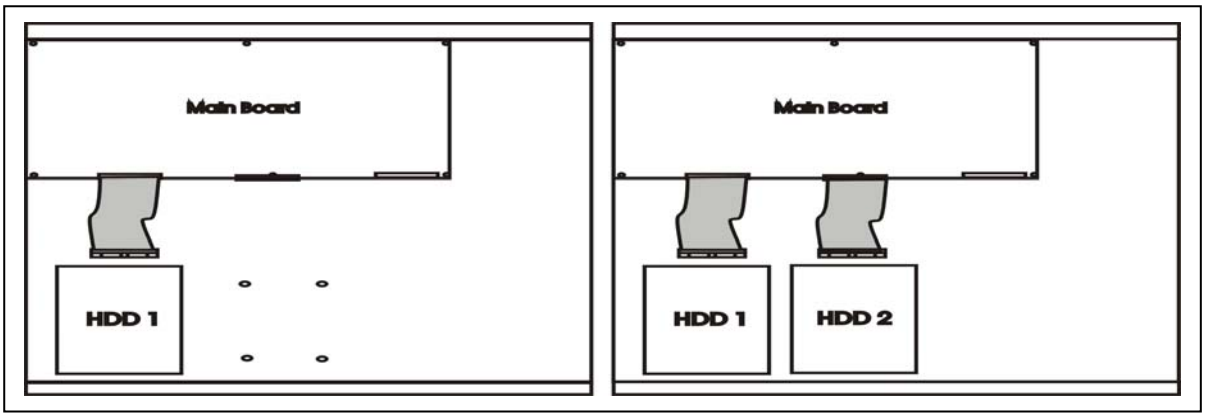
NOTICE: Sensor input is recognized as LOW when alarm signal is on a level with GND, and it is recognized as HIGH when alarm signal is FLOATING or 5V. Following is internal circuit.

Internal Circuit

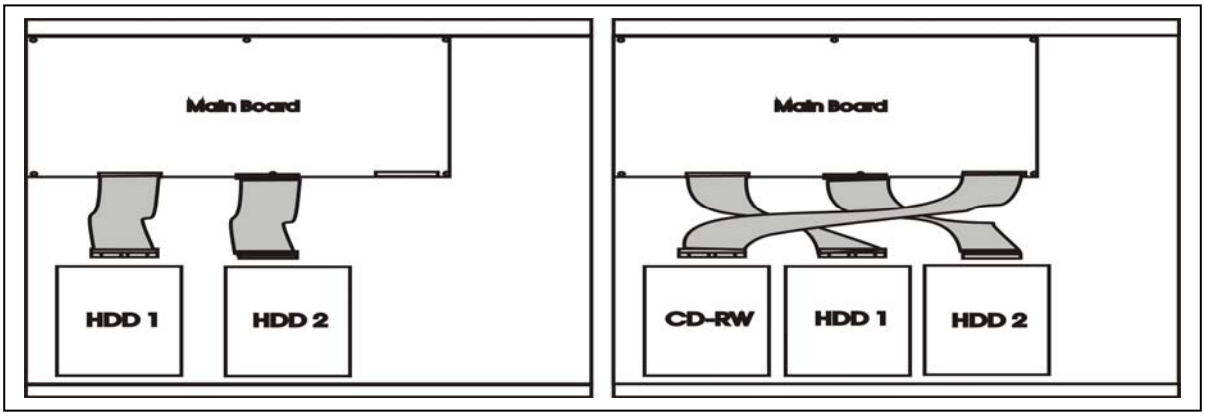


Thus, there is a danger of damage, when the sensor input goes to a Negative level or voltage higher than 5V.

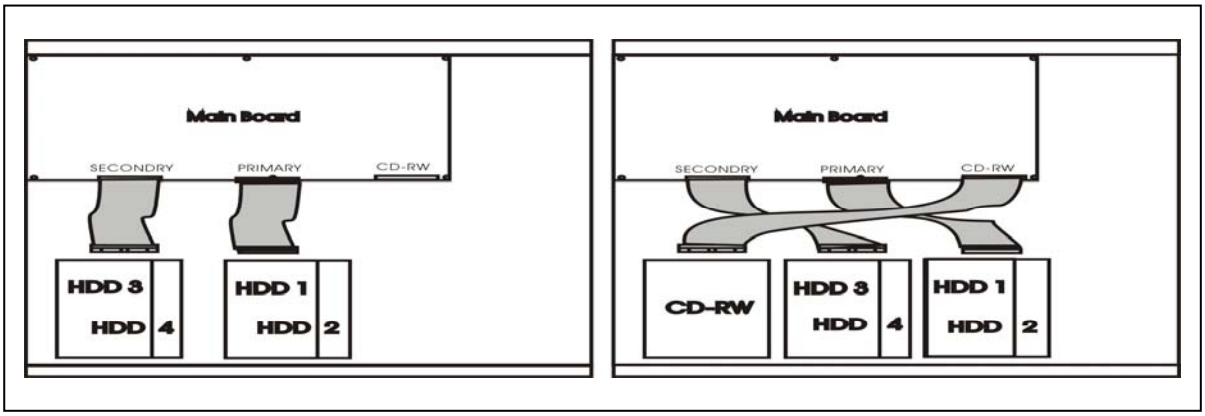
4) HDD internal connection



Master x 1 **Master x 1 / Slave x 1**



Master x 1 / Slave x 1 **CD-RW Master x 1 / Slave x 1**



Master x 1 / Master x 1 **CD-RW Master x 1 / Master x 1**

Slave x 1 / Slave x 1 **Slave x 1 / Slave x 1**

Notice:

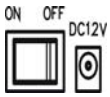
-Hard Disk Master and Slave jumper pin must be right, otherwise DVR will show fault.

5) Power Connection

Connect the power to the POWER CONNECTION on the Rear Panel of the system, and turn on the switch.

6) Turn on the POWER.

Make sure the adaptor is 12V



7) Detail setup in SYSTEM SETUP

For detail setup, refer to the instruction of SYSTEM SETUP.

Picture

Full screen or quad screen display

Press button to display quad screen.

Press numeric 1 / 2 / 3 / 4 buttons to display the desired camera image in full screen.

1.) FREEZE Mode

1. In live and the quad mode press (FREEZE) button to freeze image.
   Press again to cancel freeze mode.
2. On the full screen display, press (FREEZE) button to freeze full screen image.

2.) Zoom Mode 2 x 2 (Display Enlargement.)

Press numeric button to enter full screen mode, then press ZOOM button to enlarge screen.

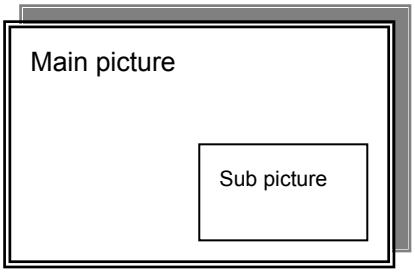
Use button to move position.

3.) Auto Mode

Press (AUTO) button to enable channel auto sequencing.

4.) PIP (PICTURE IN PICTURE)

1.) Press (PIP) button. Press (AUTO) button to enable screen auto sequencing.



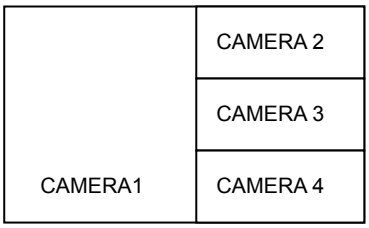
2) With button, select the main channel screen, press button to select desired camera channel in small screen.

5.) Watch DOG

DVR will auto reboot if operating system error detected, and then back to normal status.

6.) POP (PICTURE ON PICTURE)

1.) Press POP button to display pictures on screen.



7.) Alarm Sensor Recording

See the alarm recording setup page 24.

8.) Scheduled Recording

See the scheduled recording setup page 27.

9.) Motion detection Recording

See the motion detection recording setup page 25.

10.) Key Lock function

At Key lock mode, user needs to press lock button to enter password window.

At key lock mode, any button function can not be accessed.

11.) Audio function

4 audio channel recording.

See the advanced setup→ Record setup (page 27)

12.) BACKUP

BACKUP SETUP PAGE
1. BACKUP DEVICE USB FROMAT
2. BACKUP FORMAT
3. BACKUP CHANNEL □1 □2 □3 □4

START: xxxx/xx/xx xx:xx:xx
END: xxxx/xx/xx xx:xx:xx
START BACKUP
BACKUP SIZE: x / MB

FIRST: xxxx/xx/xx xx:xx:xx
LAST: xxxx/xx/xx xx:xx:xx

1.Device USB / CDRW *USB FORMAT

2.Backup format: AVI or PES.

3.Choose channel. v means this camera is selected.

START / END: Backup time range

Size: Current / Total. MB

(Current backup progress MB/ total flash drive size MB)

FIRST / LAST: record time range

Notice

1> Recording is not possible if no camera is connected.

2> PES: All channels record in quad. Use Video Viewer to play back. Screen can display on full channel or quad. (PES file format is readable by endued AP software only.)

AVI: Record in each channel.

3> Before backup, user needs to stop DVR recording.

4.>To make backup process smooth going recommend using CD-R disk to backup data.

** Multi-used CD disk is not recommend.**

Playback

1. Playback rewind Mode

Press (PLAY) button to begin playback.

(System will playback the previous time recording.)

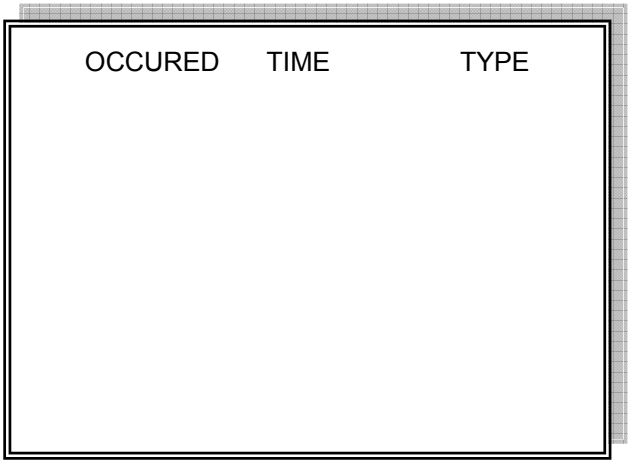
2. T-SRH mode

1) T-SRH: Playback by time list search.

Press T-SRH button to activate playback function.

Press direction button UP/DOWN to choose items.

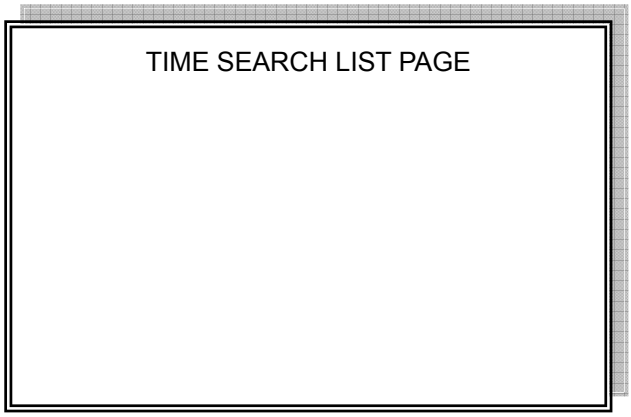
2) EVENT LIST (Alarm List): Event source- Video loss / Alarm trigger / Motion / Pwreset(DVR reboot) Key lock / Key unlock / Net login / Net logout



Notice:

Each page contains 12 events recorded; the DVR stores total 1024 events and then rewrite the oldest events when full.

3) TIME LIST (Playback image by Time-Search): Recorded images list (by hours)



FIRST: xxxx/xx/xx xx:xx:xx (The FIRST date and time recording display).

LAST: xxxx/xx/xx xx:xx:xx (The final date and time recording display).

GOTO: xxxx/xx/xx xx:xx:xx (year / month / day, Hour / Minute / Second)

Press direction button Left/Right to change date and time values position.
Press ◁ ▷ values change button to change date and time values.

PLAY GOTO TIME

After date and time input, direction move to PLAY GOTO TIME, press ENTER to start playback.

Notice:

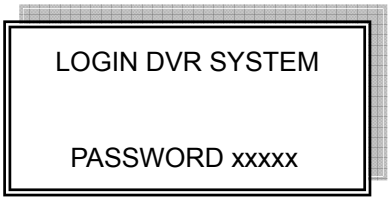
Play speed: Forward / Reverse: 1, 2, 8, 32, 64. Forward slow speed: 1/2, 1/4, 1/8, 1/16.

FUNCTION SETUP

LOGIN

1) Press (MENU) button to enter OSD menu. You could do the system function setup in MENU.

2) Password enter window pop-up:



1. Default password (Account-Admin): 00000
2. Default password (Account-User): 11111
3. Default password (Account-User): 22222
4. Default password (Account-User): 33333
5. Default password (Account-GUEST): 44444

3) Press numeric (0 ~ 9)button to enter password.

4) Remote controller function buttons are same as DVR front panel function buttons.

Notice:

1. ADMIN level can setup all DVR menu functions.
2. USER level cannot setup ADVANCED page of DVR main menu function.
3. GUEST level cannot setup DVR menu.

OSD Operation

Press MENU button to enter MAIN SETUP PAGE.

MAIN SETUP PAGE

1. HDD INFORMATION
2. DATE-TIME SETUP
3. DISPLAY SETUP
4. CAMERA SETUP
5. BUZZER&RELAY SETUP
6. SYSTEM SETUP
7. PTZ SETUP
8. ADVANCED SETUP

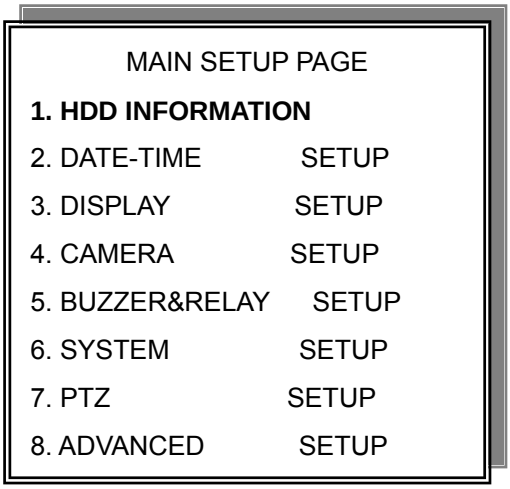
1) Use direction button up/down button to select setup item.

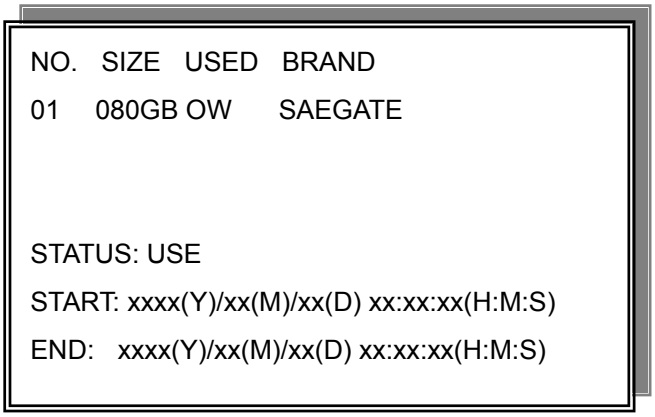
2) Press (ENTER)button to enter into sub-menu function setup.

3) Press sub-menu item with direction button up/down or left/right button.
And change the value with ◁ ▷values change button or turn inner-shuttle.

4) Press ESC to go back to main / sub menu or exit menu.

1. HDD INFORMATION





Use direction button up/down button to select HDD INFORMATION item position.

Press ESC to go back to previous menu or exit menu.

>NO: Numbers of hard disk installed.

>Size: Hard disk capacity display. xx GB.

>USED: Hard disk %. If sets overwrite, after hard disk full then starts to overwrite, it displays OW.

Hard full is 99%.

>Brand: DVR system auto detect hard disk brand after power on.

-Status: USE / IDLE

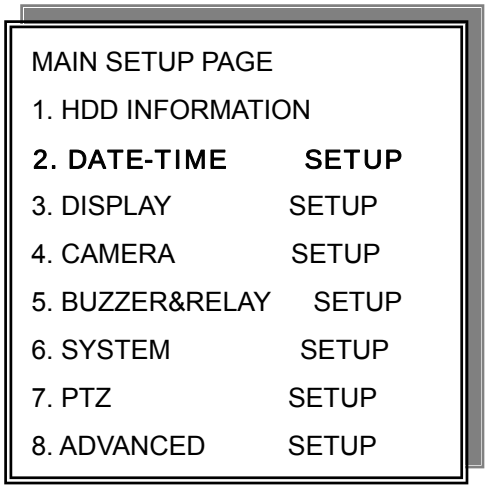
START: xxxx(Y)/xx(M)/xx(D) xx:xx:xx(H:M:S)

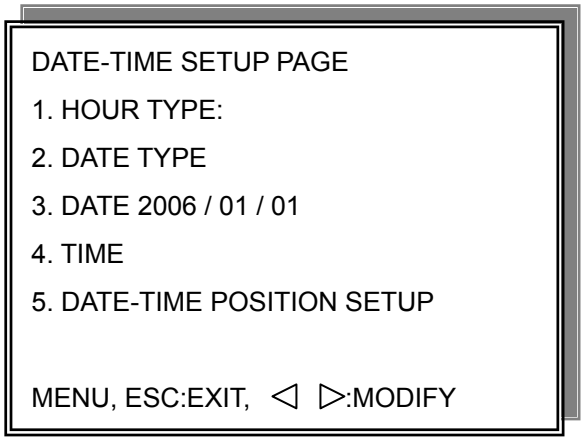
The first recording date and time display.

END: xxxx(Y)/xx(M)/xx(D) xx:xx:xx(H:M:S)

The last recording date and time display.

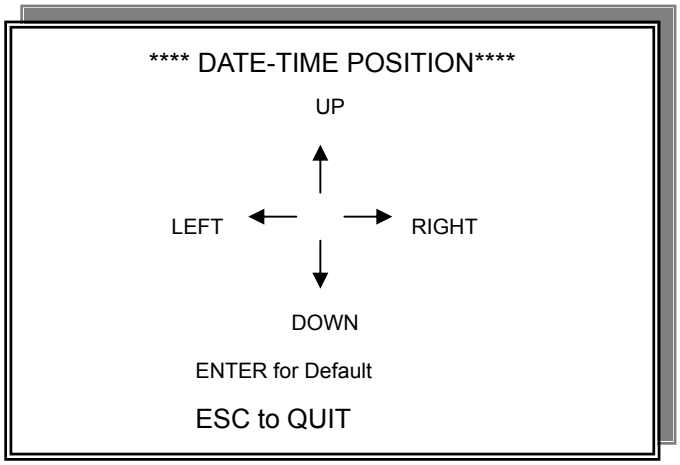
2. DATE-TIME SETUP





1. Hour Type: 12H/24H:MM:SS. 12 Hour Format / 24 Hour Format.

2. Date Type: YY/MM/DD, MM/DD/YY, DD/MM/YY, YY/ENG/DD, ENG/DD/YY, DD/ENG/YY, YYYY/MM/DD, MM/DD/YYYY, DD/MM/YYYY, YYYY/ENG/DD, ENG/DD/YYYY, DD/ENG/YYYY.
   Y=Year. M=Month. D=Day. ENG=Month display in English.
   01=January; 02=February; 03=March; 04=April; 05=May; 06=June;
   07=July; 08= August; 09=September; 10=October; 11=November; 12=December.
3. Date: 2006/01/01. Maximum insert is 2030 years.
4. Time: 12/30/49 > Use direction button up/down choose position, values change button to change date and time values. ◁ ▷
   Notice: Please stop REC function first if you want to change the time.
5. Date and Time position setup:



Press direction button UP / DOWN / LEFT / RIGHT to choose items or move date-time position.

Notice: User can see the date-time position moving when pressing direction buttons.

3. DISPLAY SETUP

MAIN SETUP PAGE
1. HDD INFORMATION
2. DATE-TIME SETUP
3. DISPLAY SETUP
4. CAMERA SETUP
5. BUZZER&RELAY SETUP
6. SYSTEM SETUP
7. PTZ SETUP
8. ADVANCED SETUP

DISPLAY SETUP PAGE
1. DATE-TIME
2. CAMERA TITLE
3. PB DATE-TIME
4. PB CAMERA TITLE
5. DVR STATUS
6. VLOSS DISPLAY

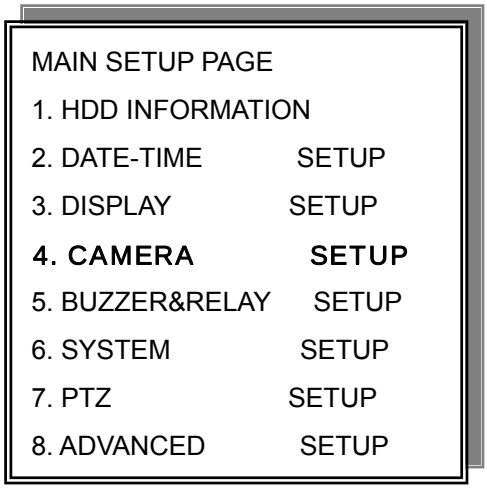
MENU, ESC:EXIT, ◁ ▷:MODIFY

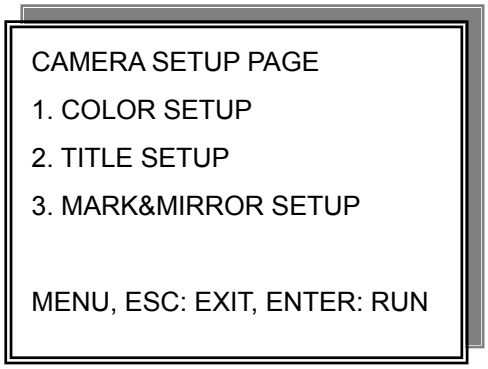
Function	Notes	Change
DATE-TIME	Date and Time caption display mode on or off setup.	ON / OFF
CAMERA TITLE	Camera Title caption display mode on or off setup.	ON / OFF
PB DATE-TIME	Playback date and time caption display mode on or off setup.	ON / OFF
PB CAMERA TITLE	Play back camera title caption display mode on or off setup.	ON / OFF
DVR STATUS	DVR system, record, playback, audio caption display mode on or off setup.	ON / OFF
VLOSS DISPLAY	Video loss display	ON / OFF

Press direction button UP / DOWN to choose the desired item.

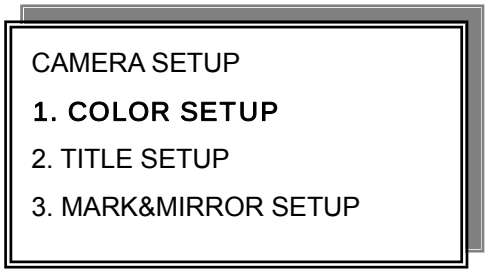
Press ◁ ▷ values change button to change values.

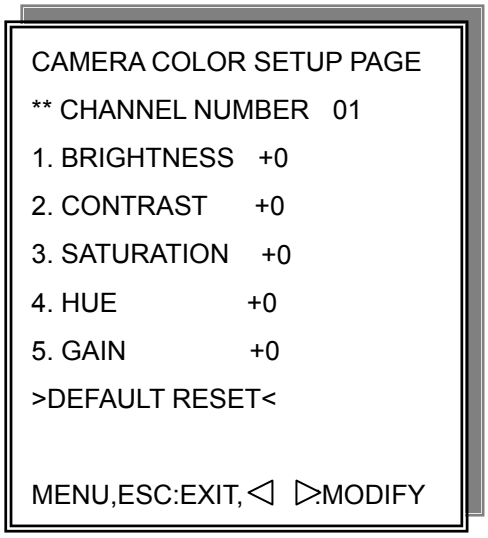
4. CAMERA SETUP





(1.) COLOR SETUP





CAMERA-COLOR SETUP : Adjust Camera Image

Function		
CHANNEL NUMBER	Select camera	01 ~ 04
BRIGHTNESS	Adjust color brightness	-31~ +32
CONTRAST	Adjust color contrast	-31~ +32
SATURATION	Adjust color saturation	-31~ +32
HUE	Adjust color hue	-31~ +32
GAIN	Adjust color gain	-31~ +32
DEFAULT RESET	Press ENTER button to reset DVR values	

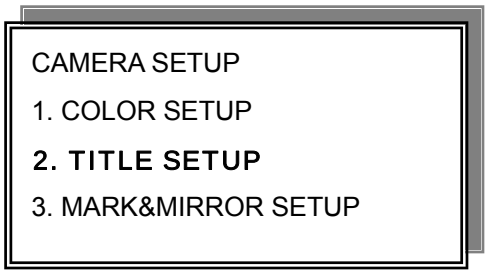
Press direction button UP / DOWN to choose items.

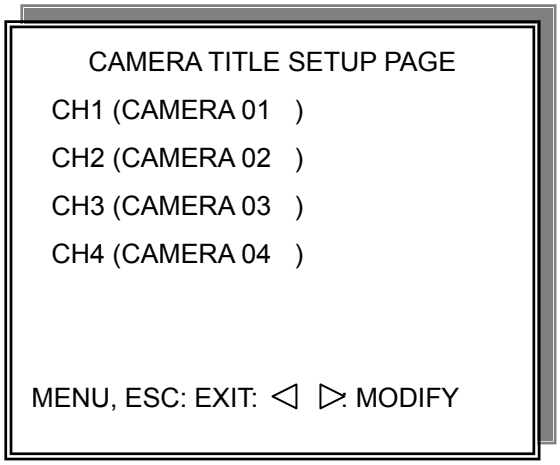
Press ◁ ▷ values change button to change values.

Notice: Right adjustment of each element in COLOR setup will increase picture quality displayed. We recommend you to adjust each element of COLOR SETUP for cameras and monitor to be connected to the DVR unit.

(2.) TITLE SETUP: Camera title setup function allows 9 characters for each channel

.





Press direction button UP / DOWN / LEFT / RIGHT to choose items and position.

Press ◁ ▷values change button to change values.

Notice:

Characters selection sequence:

Numeric: 0 / 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9

Capital letter: A / B / C / D / E / F / G / H / I / J / K / L / M / N / O / P / Q / R / S / T / U / V / W / X / Y / Z

SPACE

3.)MASK&MIRROR SETUP

CAMERA SETUP
1. COLOR SETUP
2. TITLE SETUP
3. MARK&MIRROR SETUP

MASK&MIRROR SETUP PAGE
**MASK FUNCTION OFF
1. CH 1: OFF
2. CH 2: OFF
3. CH 3: OFF
4. CH 4: OFF
**MIRROR FUNCTION OFF
1. CH 1: OFF
2. CH 2: OFF
3. CH 3: OFF
4. CH 4: OFF

MASK&MIRROR SETUP PAGE
**Channel MASK FUNCTION OFF / ON
1. CH 1: OFF / ON
2. CH 2: OFF / ON
3. CH 3: OFF / ON
4. CH 4: OFF / ON

**Image MIRROR FUNCTION OFF / ON
1. CH 1: OFF / ON
2. CH 2: OFF / ON
3. CH 3: OFF / ON
4. CH 4: OFF / ON

Press direction button UP / DOWN / LEFT / RIGHT to choose items and position.

Press ◁ ▷values change button to change values.

5. BUZZER&RELAY SETUP

MAIN SETUP PAGE
1. HDD INFORMATION
2. DATE-TIME SETUP
3. DISPLAY SETUP
4. CAMERA SETUP
5. BUZZER&RELAY SETUP
6. SYSTEM SETUP
7. PTZ SETUP
8. ADVANCED SETUP

BUZZER&RELAY SETUP PAGE
BUTTON TONE ON
**SYSTEM BUZZER OFF
1. ALARM BUZZER ON
2. MOTION BUZZER ON
3. VLOSS BUZZER ON
**SYSTEM RELAY N.O.
1. ALARM RELAY ON
2. MOTION RELAY ON
3. VLOSS RELAY ON
MENU, ESC: EXIT: ◁ ▷: MODIFY

BUTTON TONE ON / OFF

**SYSTEM BUZZER: Buzzer function

>ON / OFF

1. ALARM BUZZER:

> ON / OFF

2. MOTION BUZZER:

> ON / OFF

3. VLOSS BUZZER:

> ON / OFF

**SYSTEM RELAY N.O. / N.C.

1. ALARM RELAY:

> ON / OFF

2. MOTION RELAY:

> ON / OFF

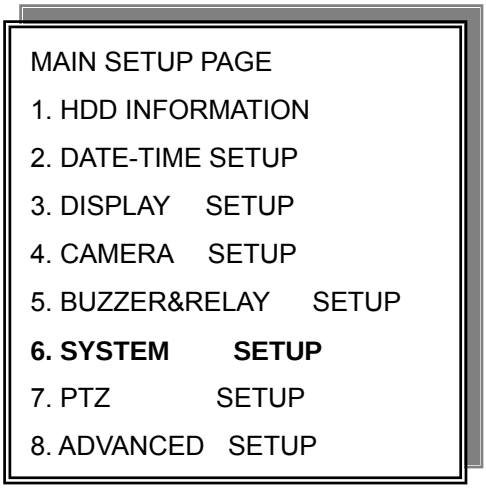
3. VLOSS RELAY:

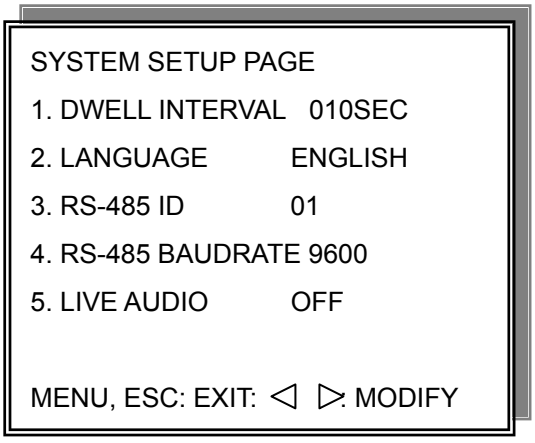
> ON / OFF

Press direction buttons UP / DOWN to BUZZER SETUP items.

◁ ▷ Press values change button to change values.

6. SYSTEM SETUP




SYSTEM SETUP PAGE
1. DWELL INTERVAL 010SEC
2. LANGUAGE ENGLISH
3. RS-485 ID 01
4. RS-485 BAUDRATE 9600
5. LIVE AUDIO OFF
MENU, ESC: EXIT: ◁ ▷: MODIFY

SYSTEM SETUP PAGE

1. DWELL INTERVAL:
   - 0 ~ 999SEC
2. LANGUAGE:
   - English / Chinese / French / Japanese / Spanish / German
3. RS-485 ID:
   -01 ~ 16
4. RS-485 BAUDRATE:
   - 9600 / 4800 / 2400
5. LIVE AUDIO
   - CH01 ~ CH04 / OFF

Notice: RS 485

1. RS-485 ID and baud rate is the command for system control keyboard. If user does not connect this DVR with control keyboard then ignore this setup.

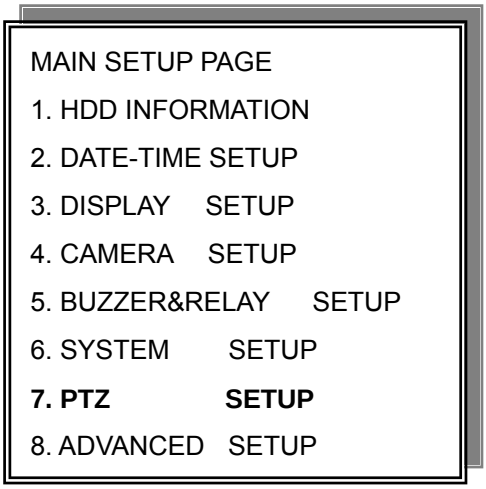
Notice: LIVE AUDIO

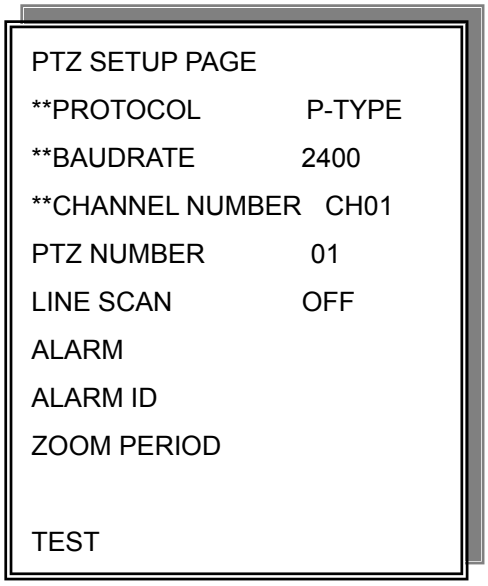
1. On quad or full screen, user needs to select channel live output.
2. But on playback mode, this function is no used. Users need to choose channel output. That means just press channel button to playback audio.

Press direction buttons UP/DOWN to choose items.

◁ ▷ Press values change button to change values.

7. PTZ SETUP





PTZ SETUP PAGE

**PROTOCOL	P-TYPE / D-TYPE
**BAUDRATE	2400 / 4800 / 9600
**CHANNEL NUMBER	CH01 ~ CH04
PTZ NUMBER	01 ~ 64
LINE SCAN	OFF / ON
ALARM	OFF / ON
ALARM ID	01 ~ 04 (Alarm trigger)
ZOOM PERIOD	1 ~ 999 SEC

TEST: This function is to simulate if the PTZ dome is connected correctly or not. If yes, the PTZ dome will activate when enter this menu.

Press direction buttons UP / DOWN to choose items.

◁ ▷ Press values change button to change values.

PS: User has to set up P1, P2 (preset point). Present 2 is the preset point for alarm event, after duration time, the camera lens return to P1 preset point. For detail setting please refer to the DVR PTZ control description.

8. ADVANCED SETUP

MAIN SETUP PAGE
1. HDD INFORMATION
2. DATE-TIME SETUP
3. DISPLAY SETUP
4. CAMERA SETUP
5. BUZZER&RELAY SETUP
6. SYSTEM SETUP
7. PTZ SETUP
8. ADVANCED SETUP

ADVANCED SETUP PAGE
1. ALARM SETUP
2. MOTION SETUP
3. RECORD SETUP
4. EVENT RECORD SETUP
5. PASSWORD SETUP
6. NETWORK SETUP
7. HDD FORMAT
8. FACTORY DEFAULT
9. UPGRADE

ADVANCED SETUP PAGE
1. ALARM SETUP
2. MOTION SETUP
3. RECORD SETUP
4. EVENT RECORD
5. PASSWORD SETUP
6. NETWORK SETUP
7. HDD FORMAT
8. FACTORY DEFAULT
9. UPGRADE

ALARM SETUP PAGE
1. ALARM FUNCTION ON / OFF
2. ALARM POPUP ON / OFF

>ALARM POLARITY SETUP<
ALARM01: NO / NC / OFF
ALARM02: NO / NC / OFF
ALARM03: NO / NC / OFF
ALARM04: NO / NC / OFF

MENU, ESC: EXIT: ◁ ▷: MODIFY

ALARM POLARITY SETUP PAGE
ALARM01: NO / NC / OFF
ALARM02: NO / NC / OFF
ALARM03: NO / NC / OFF
ALARM04: NO / NC / OFF

1. ALARM FUNCTION ON / OFF
2. ALARM POPUP ON / OFF

Press direction buttons up/down to choose items.

◁ ▷ Press values change button to change values.

Notice: ALARM POPUP

Event channel jump to full screen when alarm triggered.

2. MOTION SETUP

ADVANCED SETUP PAGE
1. ALARM SETUP
2. MOTION SETUP
3. RECORD SETUP
4. EVENT RECORD
5. PASSWORD SETUP
6. NETWORK SETUP
7. HDD FORMAT
8. FACTORY DEFAULT
9. UPGRADE

MOTION SETUP PAGE
**MOTION FUNCTION ON
**CHANNEL NUMBER CH01
1. FRAME NUMBER 03
2. SENSITIVITY 010
3. MOTION ACTIVE ON
4. MOTION AREA SETUP

MENU, ESC: EXIT: ◁ ▷: MODIFY

MOTION SETUP PAGE

**MOTION FUNCTION (For all channels)

-ON / OFF

**CHANNEL NUMBER

-01 ~ 04

1. FRAME NUMBER

Number of the block squares should larger than the number set up in frame number. If smaller, the record mode will not be active.

-1 ~ 15

2. SENSITIVITY Adjusts motion Detection Sensitivity.

-1 ~ 15

3. MOTION ACTIVE (For each channel)

-ON / OFF

4. MOTION AREA SETUP

Press direction buttons UP / DOWN to choose items.

◁ ▷ Press values change button to change values.

> MOTION AREA SETUP < (Press LOCK button for help)

****CH01 AREA MASK**** ◁ ▷ : WALK ON MODE 1.2.3.4: SELECT CHANNEL ▲▼ ◀ ▶ : MOVE CURSOR ENTER KEY: MASK OFF ESC KEY: QUIT	Press 1/2/3/4 numeric to select channel. Press ◁ ▷ value change button to change mode. Press direction button to move cursor. Press ENTER button to on mask function or off. Press ESC button to quit.

WALK ON MODE: Set up single sections one by one mode ON(SELECT).

WALK OFF MODE: Set up single sections one by one mode OFF(CLEAR).

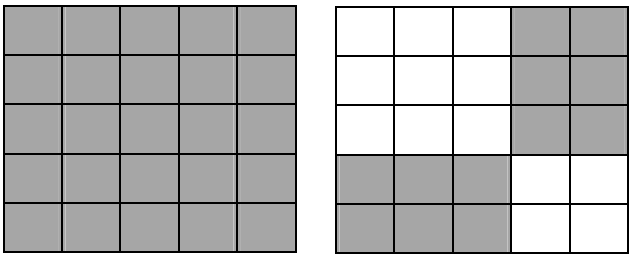
BLOCK ON MODE: Select by BLOCK area mode ON(SELECT).

BLOCK OFF MODE: Select by BLOCK area mode OFF(CLEAR).

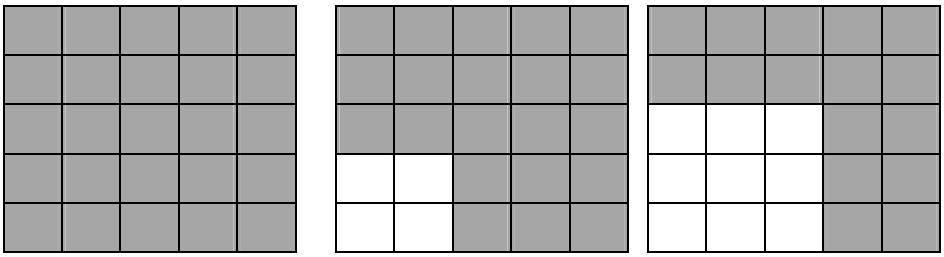
ALL ON MODE: Select all area mode ON(SELECT).

ALL OFF MODE: Select all area mode OFF(CLEAR).

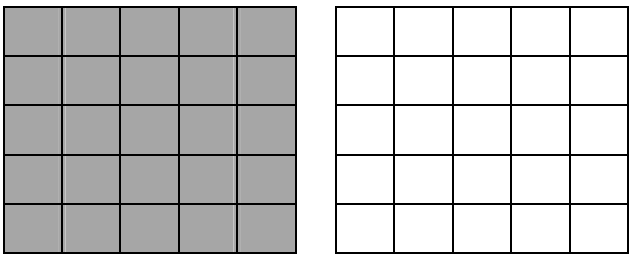
WALK ON MODE ⟷ WALK OFF MODE. Press ENTER to clear or select each sections.



BLOCK ON MODE ⟷ BLOCK OFF MODE. Press ENTER to clear or select sections by block.



ALL ON MODE ⟷ ALL OFF MODE Press ENTER to clear or select all sections.



3. RECORD SETUP

ADVANCED SETUP PAGE
1. ALARM SETUP
2. MOTION SETUP
3. RECORD SETUP
4. EVENT RECORD
5. PASSWORD SETUP
6. NETWORK SETUP
7. HDD FORMAT
8. FACTORY DEFAULT
9. UPGRADE

RECORD SETUP PAGE
1. RECORD TYPE FIELD
2. HDD FULL OVERWRITE
3. RECORD SCHEDULE
4. RECORD START
5. RESOLUTION
6. AUDIO RECORD
7. SCHEDULE SETUP
8. RECORD SPEED SETUP<

MENU, ESC: EXIT: ◁ ▷: MODIFY

RECORD SETUP PAGE

1) RECORD TYPE : FIELD / CIF
2) HDD FULL: This feature is to command DVR to OVERWRITE or STOP recording when HDD is full.
   -OVERWRITE / STOP REC
3) RECORD SCHEDULE: Time SCHEDULE record mode is on or off.
   -ON / OFF
4) RECORD START: Always record after power on.
   -ON / OFF
5) RESOLUTION: Record image quality setup
   - SUPER / HIGH / FINE / NORMAL / LOW
6) AUDIO RECORD: Audio sound effect records to hard disk.
   -ON / OFF
7) SCHEDULE SETUP
8) RECORD SPEED SETUP

Press direction buttons UP / DOWN to choose items.

◁ ▷ Press values change button to change values.

Notice:

Normal record is Independent. It will not in conflict with event record.

>SCHEDULE SETUP<

RECORD SETUP
1. RECORD TYPE FIELD
2. HDD FULL OVERWRITE
3. RECORD SCHEDULE
4. RECORD START
5. RESOLUTION
6. AUDIO RECORD
7. SCHEDULE SETUP
8. RECORD SPEED SETUP

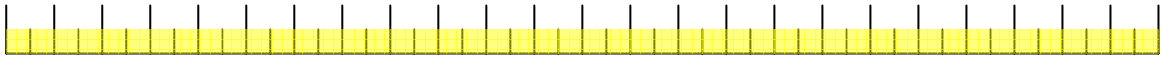
Press direction buttons to choose SCHEDULE items.

◁ ▷ Press values change button to increase or reduce

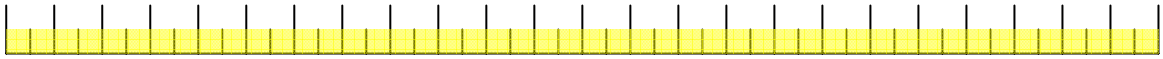
SCHEDULE SETUP

CURSOR STEP 30MIN / 5MIN

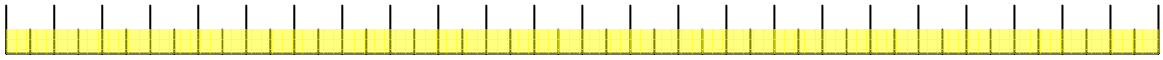
SUN



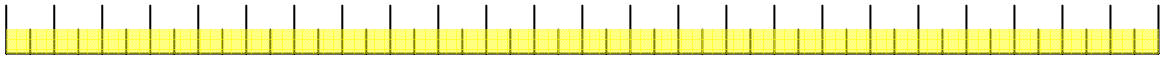
MON



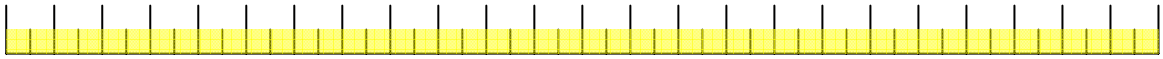
TUE



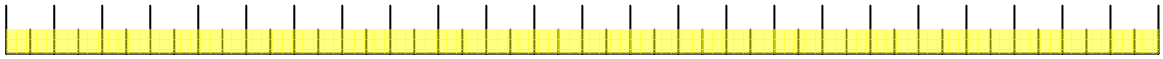
WED



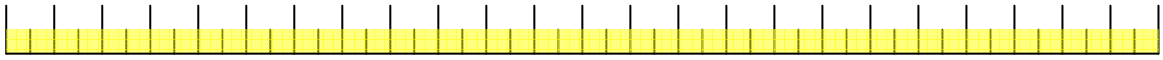
THU



FRI



SAT



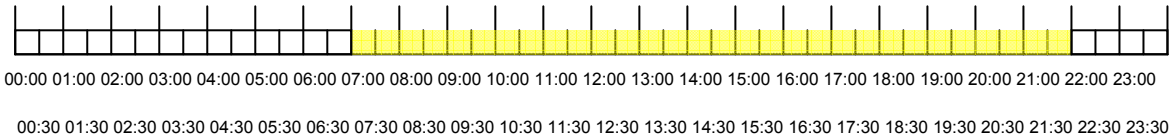
Press direction buttons UP / DOWN / LEFT / RIGHT to see date and time difference.

◁ ▷ Press values change LEFT / RIGHT button to change 30MIN or 5 MIN.

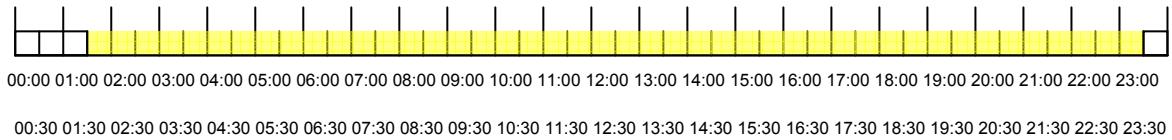
SCHEDULE SETUP 30MIN

CURSOR STEP

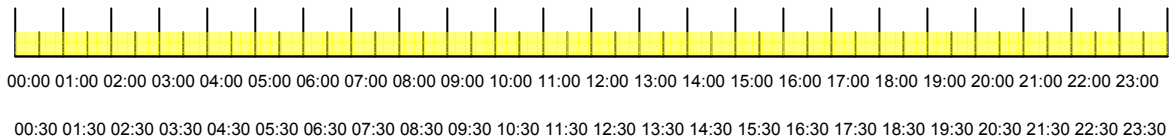
SUN



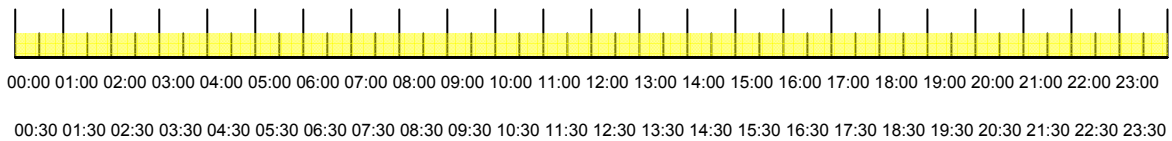
MON



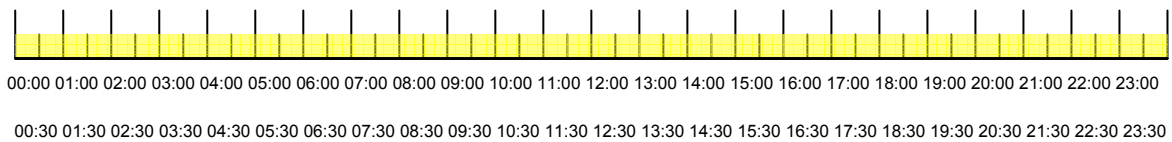
TUE



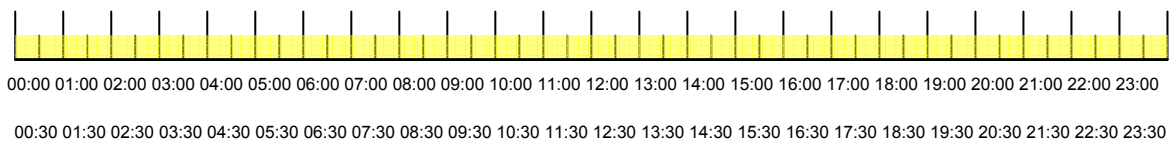
WED



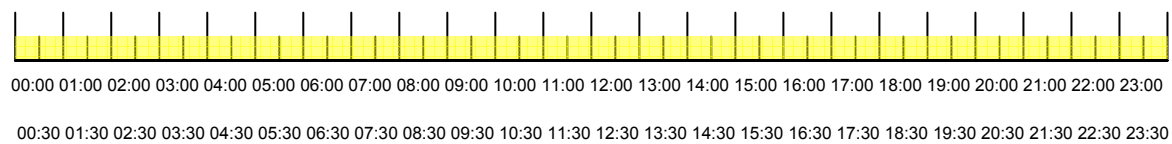
THU



FRI



SAT



Example: TUE ~ SAT, all day schedule time recording, but SUN 07:00 ~ 22:00 and MON 01:30 ~ 11:30 do schedule recording. User can press ENTER to see the schedule time area difference.

Schedule record mode, on the live mode, an “O” would shows on the left top of screen.

There are 3-color display and represent different modes of recording as following.

GREEN: Schedule record mode.

YELLOW: Schedule record starts.

WHITE: User press direction key “DOWN” to pause schedule record. Press again to start record.

>RECORD SPEED SETUP<

RECORD SETUP
1. RECORD TYPE FIELD
2. HDD FULL OVERWRITE
3. RECORD SCHEDULE
4. RECORD START
5. RESOLUTION
6. AUDIO RECORD
7. SCHEDULE SETUP
8. RECORD SPEED SETUP

RECORD SPEED SETUP PAGE
TOTAL SPEED: FULL / HALF / 20 fps / 10 fps / 4 fps
CH 01: ON
CH 02: ON
CH 03: ON
CH 04: ON

RECORD SPEED SETUP PAGE

TOTAL SPEED:

Field: FULL / HALF / 20 fps / 10 fps / 4 fps (NTSC), FULL / HALF / 24 fps / 16 fps / 8 fps (PAL)

CIF: FULL / HALF / 40 fps / 20 fps / 8 fps (NTSC), FULL / HALF / 32 fps / 16 fps / 8 fps (PAL)

CH 01: ON / OFF

CH 02: ON / OFF

CH 03: ON / OFF

CH 04: ON / OFF

Press direction buttons UP / DOWN to choose items.

◁ ▷ Press values change button to change values.

Notice:

Normal recording is independent. It will not in conflict with event record.

4. EVENT RECORD

ADVANCED SETUP PAGE
1. ALARM SETUP
2. MOTION SETUP
3. RECORD SETUP
4. EVENT RECORD
5. PASSWORD SETUP
6. NETWORK SETUP
7. HDD FORMAT
8. FACTORY DEFAULT
9. UPGRADE

EVENT RECORD SETUP PAGE
1. EVENT MOTION OFF
2. EVENT ALARM OFF
3. EVENT DURATION 0 10 SEC
4. RECORD SPEED FULL
5. RECORD RESOULTION NORMAL
6. PRIORITY RECORD OFF
7. PRE-ALARM RECORD ON
8. EVENT LOG SETUP OFF

1. EVENT MOTION -OFF / ON
2. EVENT ALARM -OFF / ON
3. EVENT DURATION 0 -10 SEC (01 ~ 999)
4. RECORD SPEED (Independent)
   Field: FULL / HALF / 20 fps / 10 fps / 4 fps (NTSC), FULL / HALF / 16 fps / 8 fps / 4 fps (PAL)
   CIF: FULL / HALF / 40 fps / 20 fps / 8 fps (NTSC), FULL / HALF / 32 fps / 16 fps / 8 fps (PAL)
5. RECORD RESOULTION -SUPER / HIGH / FINE / NORMAL / LOW (Independent)
6. PRIORITY RECORD –OFF / OFF
7. PRE-ALARM RECORD –ON / OFF (5 seconds)
8. EVENT LOG SETUP – ON/OFF

Press direction buttons
UP / DOWN / LEFT / RIGHT
to choose items.

◁ ▷ Press values change button to change values.

EVENT SETUP PAGE
1. MOTION EVENT ON
2. ALARM EVENT ON
3.VLOSS EVENT ON
4.SYSTEM EVENT ON

1. MOTION EVENT ON/OFF
2. ALARM EVENT ON/OFF
3. VLOSS EVENT ON/OFF
4. SYSTEM EVENT ON/OFF

Notice:

Event recording is Independent. It will not in conflict with normal record.

5. PASSWORD SETUP

ADVANCED SETUP PAGE
1. ALARM SETUP
2. MOTION SETUP
3. RECORD SETUP
4. EVENT RECORD
5. PASSWORD SETUP
6. NETWORK SETUP
7. HDD FORMAT
8. FACTORY DEFAULT
9. UPGRADE

PASSWORD SETUP PAGE
1. PASSWORD AUTH
2. REMOTE CONTROL
3. ADMIN (00000)
4. USER1 (11111)
5. USER2 (22222)
6. USER3 (33333)
7. GUEST (44444)

PASSWORD SETUP PAGE
1. PASSWORD AUTH ON / OFF
2. REMOTE CONTROL ON / OFF
3. ADMIN (00000)
4. USER1 (11111)
5. USER2 (22222)
6. USER3 (33333)
7. GUEST (44444)

Press direction buttons UP / DOWN / LEFT / RIGHT to choose items position.

User press 0 ~ 9 numeric to choose password.

Notice:

1. ADMIN level can setup all DVR menu functions.
2. USER level cannot setup ADVANCED page of DVR main menu function.
3. GUEST level cannot access to DVR menu.
4. REMOTE CONTROL:

ON: Network management has authority to control DVR.

OFF: Network management and user have no authority to control DVR.

PS. DVR management authorization is higher than network management.

6. NETWORK SETUP

ADVANCED SETUP PAGE
1. ALARM SETUP
2. MOTION SETUP
3. RECORD SETUP
4. EVENT RECORD
5. PASSWORD SETUP
6. NETWORK SETUP
7. HDD FORMAT
8. FACTORY DEFAULT
9. UPGRADE

STATIC IP SETUP PAGE
1.NETWORK FUNCTION
2. SMTP SETUP
3. PORT
4. TYPE STATIC IP CON
IP: xxx.xxx.xxx.xxx
MASK: xxx.xxx.xxx.xxx
GATE WAY:xxx.xxx.xxx.xxx
DNS:xxx.xxx.xxx.xxx

STATIC IP SETUP PAGE

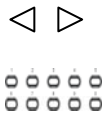
1. NETWORK FUNCTION : ON / OFF. Needs to keep on, if network uses.

2. SMTP

SMTP SETUP PAGE

Press direction buttons UP / DOWN / LEFT / RIGHT to choose items position.

1. FUNCTION: ON / OFF
2. MAIL SERVER:
3. USER NAME
4. PASSWORD
5. EMAIL ADDRESS



Press values change button or numeric key to change values.

TEST : Send a mail to mail account for testing.

3. PORT: 00080. Depends on network system. Usually is 80.

4. TYPE STATIC IP CON.

-Using direction button to move on here, using value change button to choose STATIC IP.

IP : xxx.xxx.xxx.xxx

MASK: xxx.xxx.xxx.xxx

GATE WAY: xxx.xxx.xxx.xxx

DNS: xxx.xxx.xxx.xxx

- Input all IP information base on LAN or WAN.

Notice:

After IP information input, go back to 4. TYPE STATIC IP CON. Choose CON. And then press ENTER to load. If correct, Network connecting shows under screen.

PPPOE: USER NAME / PASSWORD / DNS

DYNAMIC IP: Local network IP auto detect.

7. HDD FORMAT

ADVANCED SETUP PAGE
1. ALARM SETUP
2. MOTION SETUP
3. RECORD SETUP
4. EVENT RECORD
5. EVENT
6. PASSWORD SETUP
7. HDD FORMAT
8. FACTORY DEFAULT
9. UPGRADE

Press direction buttons UP / DOWN to HDD FORMAT items position.
Press ENTER to format all HDD.

Caution: User can format HDD only when all HDD stop record or playback.

→ HDD FORMAT CAUTION!! :

FORMAT CAUTION
ALL DATA IN STORAGE DEVICE WILL BE DESTROYED!!
PRESS [ENTER] TO FORMAT ALL HDD.
PRESS [ENTER] TO FORMAT NEW HDD.
PRESS [ESC] TO CANCEL.

Press ENTER button to format hard disk.

Press ESC button to cancel hard disk format

****PLEASE WAIT, HDD FORMATING.**

****HDD FORMAT, COMPLETED.**

8. FACTORY DEFAULT

ADVANCED SETUP PAGE
1. ALARM SETUP
2. MOTION SETUP
3. RECORD SETUP
4. EVENT RECORD
5. EVENT
6. PASSWORD SETUP
7. HDD FORMAT
8. FACTORY DEFAULT
9. UPGRADE

Press direction buttons UP / DOWN to FACTORY DEFAULT items position.
Press ENTER to restore.

** CAUTION!!**
ALL SETUP VALUE WILL BE CHANGE.

PRESS [ENTER] TO RESTORE DEFAULT.
PRESS [BKUP] TO BACKUP CONFIG.
PRESS [TSH] TO RESTORE FROM FILE.
PRESS [ESC] TO CANCEL.

Press ENTER button to restore.

Press ESC button to cancel.

9. UPGRADE. USB / CD-R disk selection.

ADVANCED SETUP PAGE
1. ALARM SETUP
2. MOTION SETUP
3. RECORD SETUP
4. EVENT RECORD
5. EVENT
6. PASSWORD SETUP
7. HDD FORMAT
8. FACTORY DEFAULT
9. UPGRADE

UPGRADE
DVR VER: x.x.xx
FILE VER: x.x.xx
ENTER: START UPGRADE
ESC: EXIT UPGRADE

UPGRADE
NO USB

ESC: EXIT

Notice:

Do not power off or remove flash drive when system update.

Specification and configuration

Model	4 CH DVR
Video I/F	NTSC / PAL Auto Detection
Input	4 CH inputs 1.0Vp-p, 75ohm unbalanced (BNC Type)
Output	Main monitor Composite (BNC),
	4 looping output (BNC)
S/N Ratio	More than 40dB
Color	6.7 Million
Monitoring Method	
Display Screen	1, 4 CH, PIP, 2 x Zoom, Freeze
Zoom	Live & PB Available, 2 x 2 zoom
Sequence	Available
Screen Quality	Full: 720(H) x 480(V) Active Pixels (NTSC);
	720(H) x 576(V) Active Pixels (PAL)
	1/4 Screen: 360(H) x 240(V) Active Pixels (NTSC);
	360(H) x 288(V) Active Pixels (PAL)
Display Rate	120 frames
Recording/ Play Function	
Recording (Max)	Field: FULL / HALF/ 20 fps / 10 fps / 4 fps
	CIF: FULL / HALF / 40 fps / 20 fps / 8 fps
Record Quality	Super, High, Fine, Normal, Low
Compressed Picture	MPEG4
Picture Recording Method	CIF / Field
REC. Mode	Time-Lapse / Event
Playback Mode	Date/ Time search or event search
Other Function	
Operation Mode	Triplex (Record / Playback / Network)
Watch DOG	Available
Motion Detect Area	16 x12, ON/OFF sector selectable.
	Motion detect recording
Alarm	4 alarm In / 1 relay Out
Back-Up	USB, Flash Drive. (Card reader + CF is not supported.)
RS485	For control keyboard
Storage	4 IDE HDD (maximum)
Audio Input	RCA x 4
Audio Output	RCA x 1
VGA Output	VGA x 1 (optional)

Mechanical

IR Remote Controller	Standard
JOG Shuttle	X 1
Power Supply	DC 12V / 5 A if hard disk x 2 installed DC 12V / 8.33 A if hard disk x 3 or x 4 installed
Weight	N.W.:7.3 kg
Dimension	430 (W) x 360 (D) x 72.6 (H) mm
Operating Temperature	41° F~104° F (5° C~+40° C)
Operating Humidity	Less than 90%

DVR control PTZ dome (User needs to login if password protection is on)

KAY 0 : To PTZ control mode.
KEY 1 ~ 4 : Select camera.
KEY 5: Exit preset function.
KEY6 ~ KEY 9 / (Preset 1 ~ Preset 4): To preset position then preset setup mode on. (4 Preset setup support.)
KEY QUAD: Set the preset position.

Example:
1. Set preset 1, key 6, (P1) shows on right-up screen. Then move PTZ dome to any position wants. Key QUAD to finished. (P1)

2. Set preset 3, key 8, (P3) shows on right-up screen. Then move PTZ dome to any position wants. Key QUAD to finished. (P3)

KEY ZOOM: 2 functions. 1: ZOOM IN / 2.To PTZ OSD menu item select.
KEY FREEZE: 2 functions. 1: ZOOM OUT / 2.To PTZ OSD item value select.
KEY AUTO: A to B LINE SCAN
KEY MENU: To PTZ MENU OSD function
KEY ESC:IRIS OPEN
KEY LOCK:IRIS CLOSE
KEY +: Set LINE SCAN left side point.
KEY -: Set LINE SCAN right side point.
KEY PLAY: FOCUS NEAR
KEY REC: FOCUS FAR
KEY UP / DOWN / LEFT / RIGHT: Control PTZ moving.

Record Time Table: 80 GB HD (Approximate Time Table)

Record Quality: Low

FPS	Full	Half	20	10	4
Hours	163 hr	243 hr	280 hr	379 hr	520 hr

Record Quality: Normal

FPS	Full	Half	20	10	4
Hours	113	194 hr	253 hr	357 hr	506 hr

Record Quality: Fine

FPS	Full	Half	20	10	4
Hours	62 hr	114 hr	158 hr	260 hr	423 hr

Record Quality: High

FPS	Full	Half	20	10	4
Hours	51 hr	96 hr	132 hr	225 hr	387 hr

Record Quality: Super

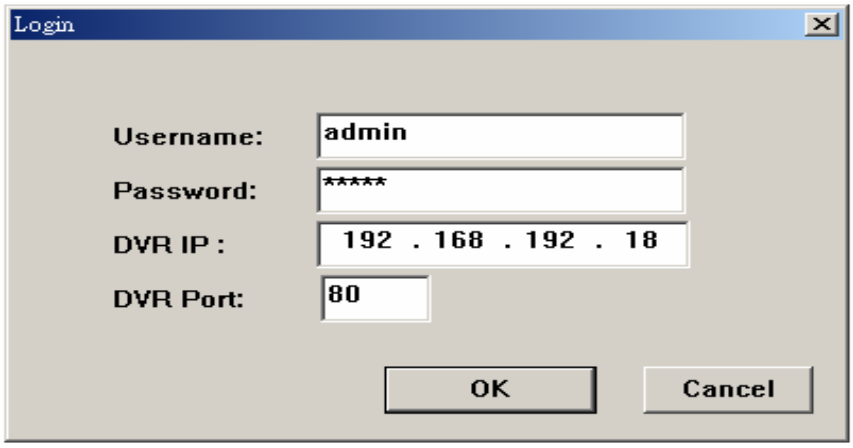
FPS	Full	Half	20	10	4
Hours	42 hr	79 hr	113 hr	197 hr	357 hr

Actual recording time is base on live environment. This table is only for reference.

Network and USB data read

1. In CD ROM, double click setup.exe to access software installation.
2. Suggest computer system up to PIV 2.0 GHz , RAM up to 256 MB , VGA card up to 64M. Windows XP / 2000.
3. Close Microsoft NetMeeting if it is running. And then restart client viewer.
4. Make sure the VGA card driver is originally from VGA manufacturer.
5. Make sure Microsoft DirectX 9.0b is installed.
6. Make sure IE all ActiveX item are all on.

Input user's name / password / DVR IP Address / DVR Port according your LAN or WAN system.



Press OK to login. Press cancel to quit if user is not going to view through LAN or WAN.
Or go in AP to view PES from backup in USB device.

FUNCTION BUTTON:

Click Live to view image.

A.

1. Live: to live mode.
2. Download: to playback mode.
3. File Play: to file play mode.
4. PTZ: to PTZ dome mode

B.

1. Live: Live mode status.
2. File: File mode status.
3. Event: Event mode status.
4. D.L.: Play back mode status.
5. Net: Network connecting status.

C.

REC: live record button.

Setting: record path setup button.

Capture: image capture button (.bmp).

Event: event list.

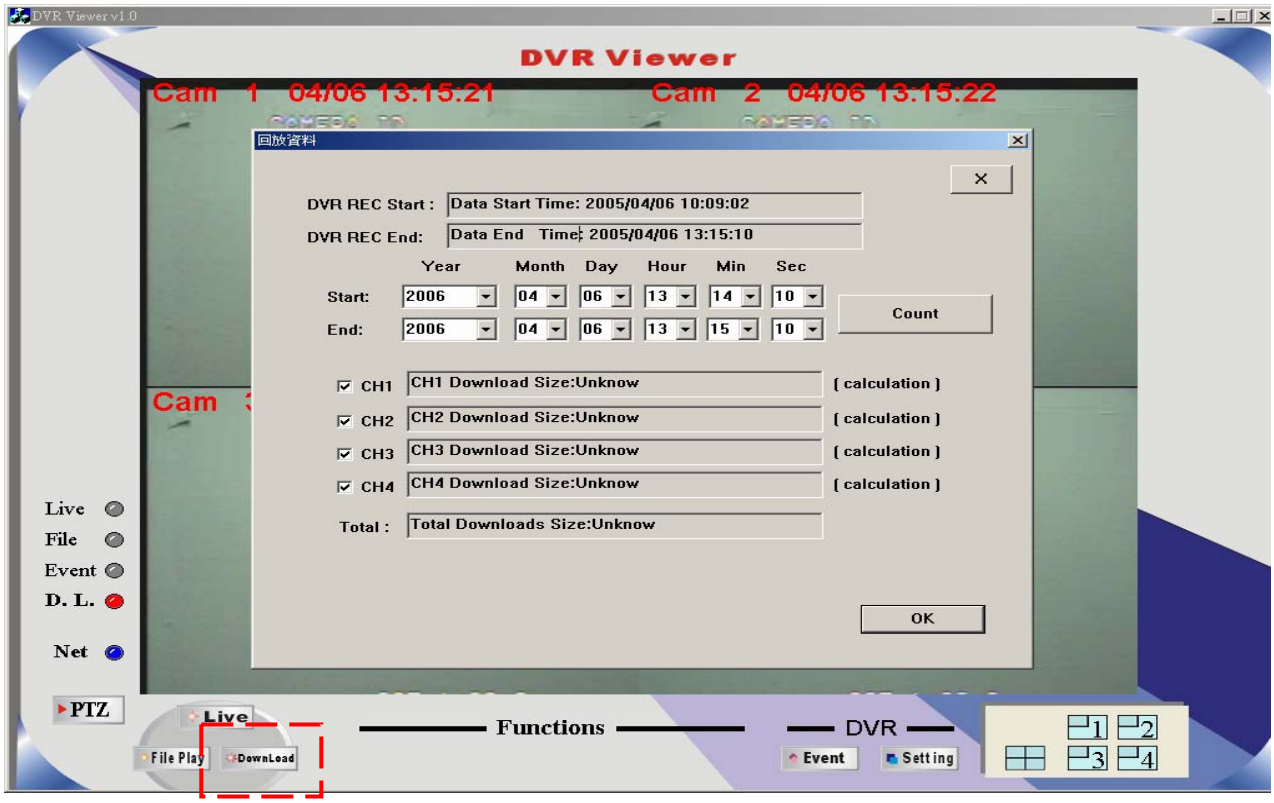
Setting: DVR function setup.

D.

1 ~ 4 full screen display.

Quad mode display.

Download: press download to playback mode.



DVR REC Start: DVR record start time.

DVR REC End: DVR record end time.

Start: choose playback start time.

End: choose playback end time.

** Last one minute display.**

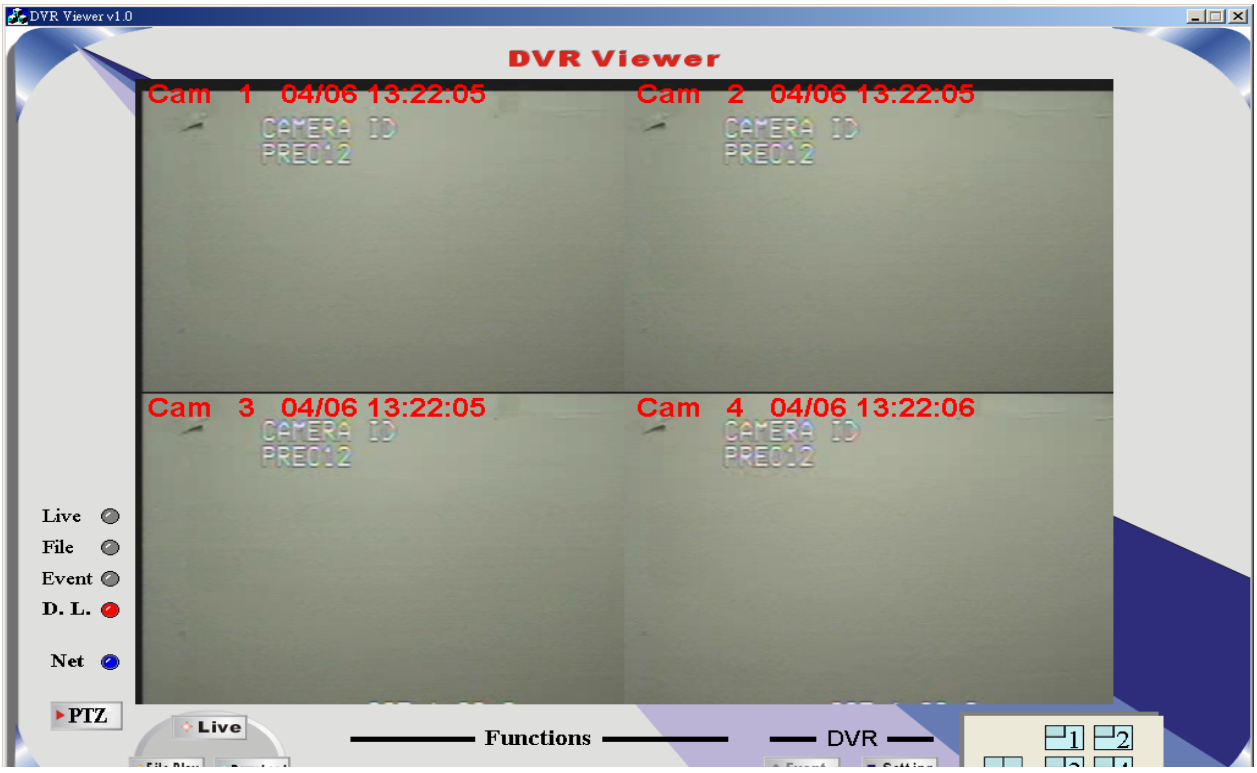
CH 1 ~ CH 4: choose camera.

Press **Count** button to calculate data size.

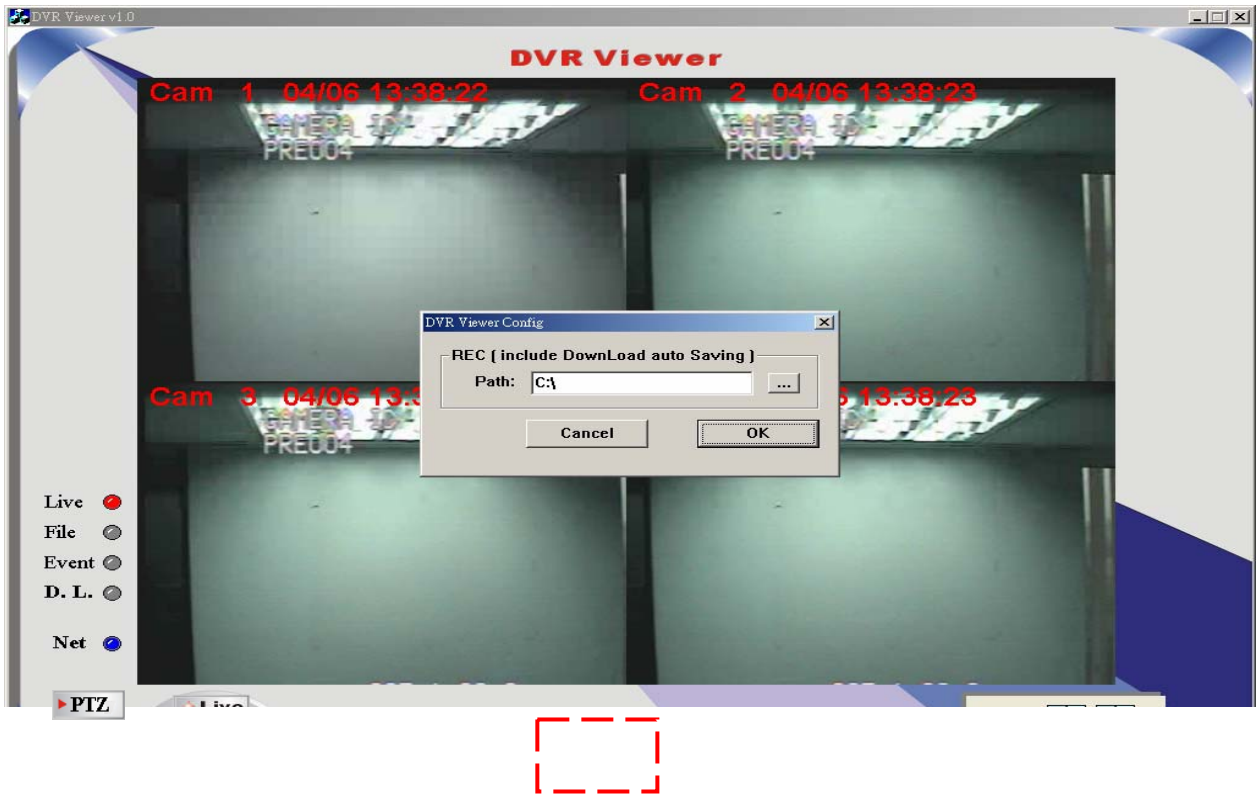
After data count, press OK to start playback.

PTZ

Playback data auto save to REC path.



Record path setup: .ps file saved.



REC: press REC button to record live image.

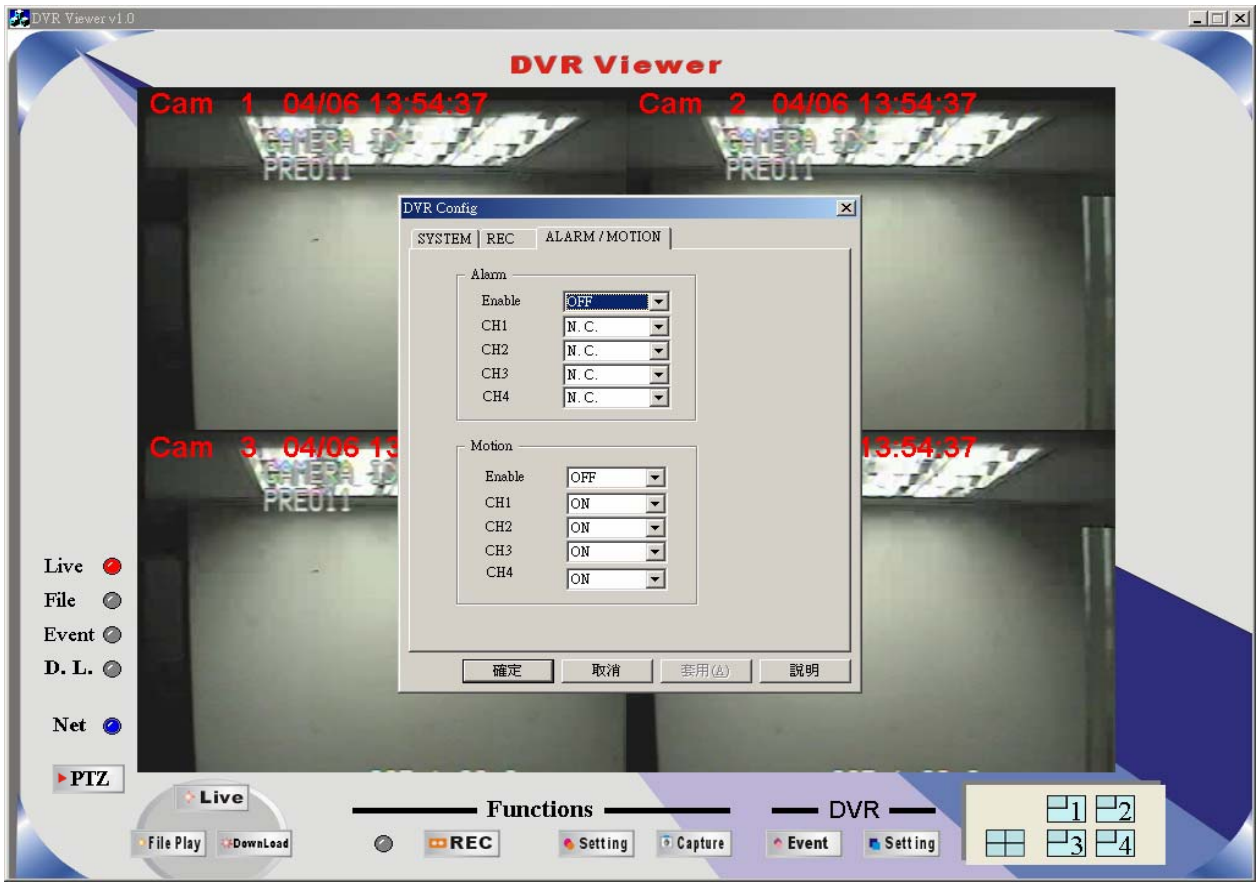
Capture: Capture image file to .bmp saved. Only live and file play acceptable.

Press Setting to DVR function setup: 1. SYSTEM 2. REC 3. ALARM / MOTION.

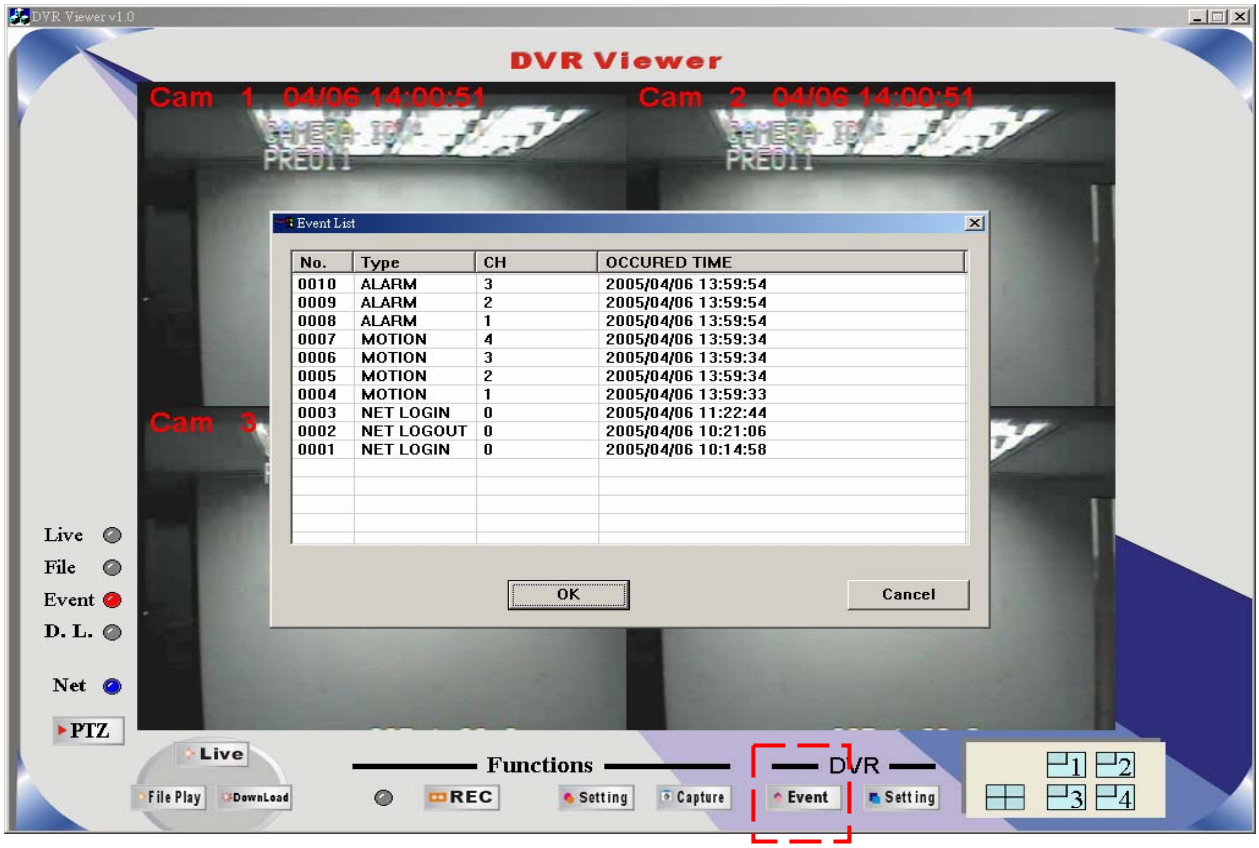
1. System

2. REC

3. ALARM / MOTION

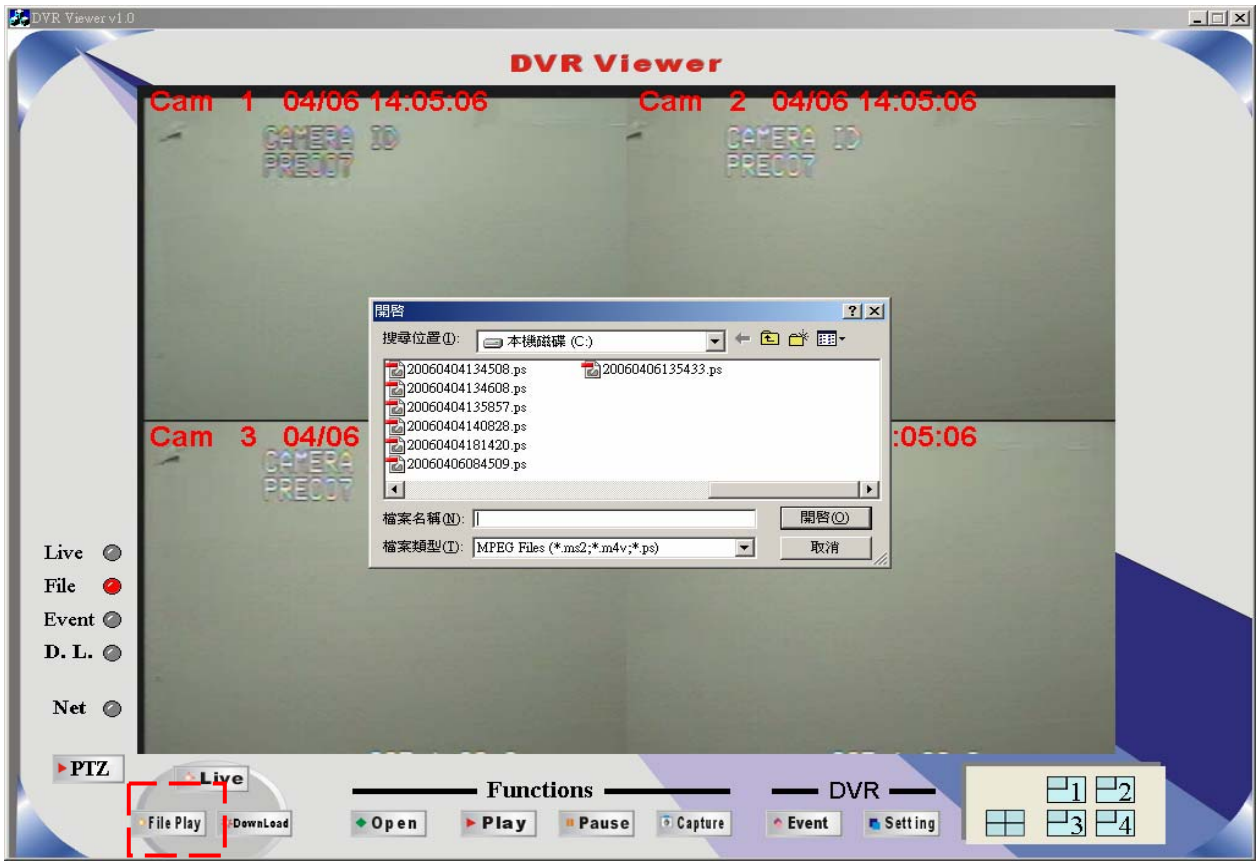


Event: Event list playback. Only alarm and motion playback.



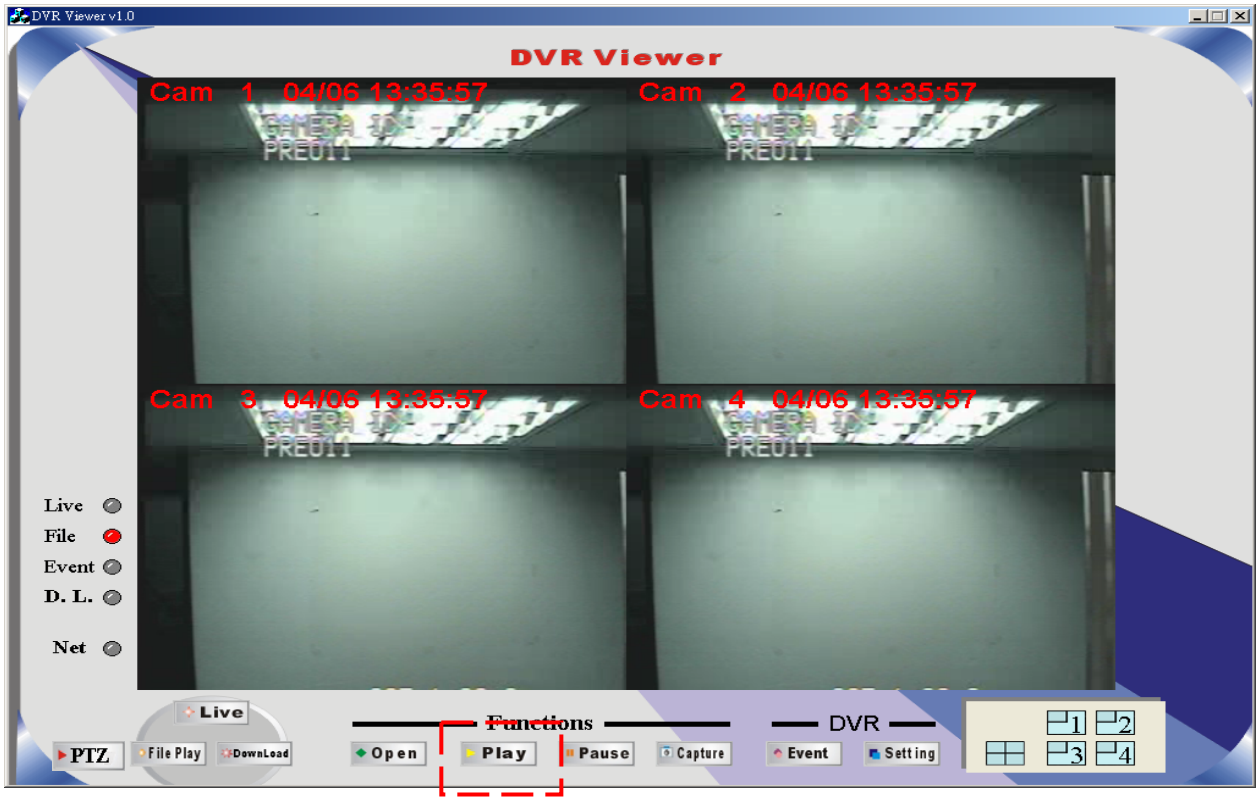
Choose event time, click OK to start playback.

Press File Play to data backup play mode. Click Open to choose file.



Choose path and file name and then ready to play mode.

Press Play to start back up data playback mode.



For the setting details please refer to the remark on page 25 / 40 of the P/T/Z dome mode.

Click PTZ button to control mode, and then select channel 1 ~ channel 4 which is corresponding to PTZ dome

PTZ Control function:

Click the left button of mouse on direction arrowhead, on each click, the PTZ dome will move 16 +/- 4 degree.

The Numeral presents for camera channel not PTZ ID.

Memo